REMARKS

Applicant would like to thank the Examiner for her useful comments during the telephone conversation on May 10, 2007. Applicant has carefully reviewed and considered the Office Action mailed on May 3, 2007 in response to Applicant's February 12, 2007 response to the Restriction Requirement mailed on January 11, 2007. In the February 12, 2007 response, Applicant elected Group II (claims 3-4) with traverse. Applicant simultaneously amended Group II claim 3 and cancelled claim 4 while incorporating the elements of claim 4 into claim 3. Further, Applicant amended Group V (claim 7) and added claims 10-13 wherein claims 10-11 depend from claim 3 and claims 12-13 depend from claim 7.

In the January 11, 2007 Office Action the Examiner restricted the application to one of the following claim groupings:

- I. Claims 1 and 2, drawn to a method for detecting aberrant promoter methylation comprising detecting methylation of the PAX5 α gene, classified in class 435. subclass 91.2 (a cellular exponential or geometric amplification (e.g. PCR etc)).
- II. Claims 3 and 4, drawn to a method for detecting aberrant promoter methylation comprising detecting methylation of the PAX5 β genc, classified in class 435, subclass 91.2 (acellular exponential or geometric amplification (e.g. PCR etc)).
- Claim 5, drawn to a method of monitoring for cancer comprising detecting PAX5 Ш. α gene inactivation, classified in class 436, subclass 63.

Protein, Novel Gene 2, and Beta 3 Genes

IV. Claim 6, drawn to a method of monitoring for cancer comprising detecting PAX5 β gene inactivation, classified in class 436, subclass 63.

Title: Cancer Monitoring by Aberrant Promotor Methylation of the Transcription Factor Genes PAX5 Alpha PAX5 Beta, Novel Loop Hetix Loop

- V. Claim 7, drawn to a method of monitoring for cancer comprising detecting PAX5 α gene inactivation comprising using primer sequences which recognize a bisulfite-modified DNA template, classified in class 435, subclass 91.5 (acellular preparation of polynucleotide).
- VI. Claim 8, drawu to a single-stranded DNA primer, namely SEQ ID NO: 1 for PAX5 α gene, classified in class 536, subclass 24.33. Claim 8 will be examined with this Group to the extent the primer has the specific nucleic acid sequences of SED ID NO:1.
- Claim 8, drawn to a single-stranded DNA primer, namely SEO ID No: 2 for VII. PAX5 α genc, classified in class 536, subclass 24.33. Claim 8 will be examined with this Group to the extent the primer has the specific nucleic acid sequence of SEO ID NO: 2.
- VIII. Claim 8, drawn to a single-stranded DNA primer, namely SEQ ID NO: 5 for PAX5 α gene, classified in class 536, subclass 24.33. Claim 8 will be examined with this Group to the extent the primer has the specific nucleic acid sequences of SEQ ID NO: 5.
- IX. Claim 8, drawn to a single-stranded DNA primer, namely SEQ ID NO: 6 for PAX5 α genc, classified in class 536, subclass 24.33. Claim 8 will be examined with this Group to the extent the primer has the specific nucleic acid sequences of SEO ID NO: 6.

- X. Claim 9, drawn to a single-stranded DNA primer, namely SEQ ID NO: 3 for
 - PAX5 β gene, classified in class 536, subclass 24.33. Claim 9 will be examined with this Group to the extent the primer has the specific nucleic acid sequences of
 - SEQ ID NO: 3.
- XI. Claim 9, drawn to a single-stranded DNA primer, namely SEQ ID NO: 4 for
 - PAX5 β gene, classified in class 536, subclass 24.33. Claim 9 will be examined
 - with this Group to the extent the primer has the specific nucleic acid sequences of
 - SEO ID NO: 4.
- XII. Claim 9, drawn to a single-stranded DNA primer, namely SEQ ID NO: 7 for
 - PAX5 β gene, classified in class 536, subclass 24.33. Claim 9 will be examined
 - with this Group to the extent the primer has the specific nucleic acid sequences of
 - SEQ ID NO: 7.
- XIII. Claim 9, drawn to a single-stranded DNA primer, namely SEQ ID NO: 8 for
- PAX5 β gene, classified in class 536, subclass 24.33. Claim 9 will be examined
 - with this Group to the extent the primer has the specific nucleic acid sequences of
 - SEO ID NO: 8.
- In the May 3, 2007 Office Action, the Examiner indicates that Applicant's election of
- Group II (claim 3 as amended) was directed to an invention that is independent or distinct from
- the juvention as originally claimed. Applicant disagrees with the Examiner's statement.
 - In the February 12, 2007 Preliminary Amendment, claims 3 and 7 were amended, claims
- 1-2, 4-6 and 8-9 were canceled, and claims 10-13 were added; as a result, claims 3, 7, 10-13 are
- now pending. No new matter has been added.

The scope of amended claim 3 remains detecting PAX5 B gene promoter methylation. The additional element of PCR amplification was added to claim 3 to clarify the invention. Claim 3 is categorized in class 435 and subclass 91.2 (acellular exponential or geometric amplification (e.g. PCR etc)). Further claim 3 was amended to broaden the method to include detecting aberrant promoter methylation in biological specimens which is not limited to a particular organ.

The Examiner has classified claim 7 in class 435 and subclass 91.5 (acellular preparation of polynucleotide). However claim 7 as originally filed also includes acellular exponential or geometric amplification (e.g. PCR). Therefore claim 7 should have been assigned to the same class and subclass as Group II claims.

Applicant requests that the Examiner reconsider the Restriction Requirement in light of Applicant's Preliminary Amendment and combine Group V (claim 7 and claims depending therefrom) with Group II (claims 3 and claims depending therefrom). Applicant believes that it would not be an undue burden for the Examiner to review claim 3 and claim 7 is a single search as both claims are found in the same class 435 and subclass 91.2.

Further, the Examiner is requested to reconsider the restriction requirement of Group VI-XIII claims, as Group VI-XIII claims represent claims depending from amended claims 3 and 7 for primer sequences generically disclosed in the independent claims of 3 and 7 therein. Further still, the pending claims should be treated under MPEP section 804.04 which permits up to ten (10) sequences to be examined without creating an undue burden on the Office. (37 C.F.R. 1.141). Therefore, the Examiner is requested to reconsider the Restriction Requirement and examine claims 3 and 7 and the claims that depend there from in group II.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (505 998 6134) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 13-4213.

Respectfully submitted,

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